



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,547	01/25/2002	Eric Wolfsgrubner	02-121	3047

7590 08/23/2006
Gregory P. LaPointe
Bachman & LaPointe, P.C.
Suite 1201
900 Chapel Street
New Haven, CT 06510-2802

EXAMINER

ZIMMERMAN, JOHN J

ART UNIT	PAPER NUMBER
----------	--------------

1775

DATE MAILED: 08/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/057,547

Applicant(s)

WOLFSGRUBER ET AL.

Examiner

John J. Zimmerman

Art Unit

1775

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/5/06 & 5/18/06.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-16 and 18-24 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 11-16 and 18-24 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/647,547.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

SECOND OFFICE ACTION AFTER SECOND RCE

Amendments

1. This Second Office Action After Second RCE considers the claims as amended in the "AMENDMENT UNDER 37 C.F.R. 1.111(C)" received May 18, 2006 and the "SUPPLEMENTAL AMENDMENT" received June 5, 2006. Claims 11-16 and 18-24 are pending in this application.

Claim Rejections - 35 USC § 102/103

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Art Unit: 1775

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 11-13, 16 and 18-24 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Valdo (U.S. Patent 3,848,666).

5. Valdo discloses an article comprising a foamed metal body having embedded metal structural elements (e.g. tubes, blocks or plates) which may or may not extend to the panel's surface and which act as reinforcements (e.g. see column 5, lines 8-41). Valdo specifically discusses foaming the panels between molding sheets and then removing the molding sheets (e.g. see column 3, lines 8-40). This forms a mold shaped demolded shaped foamed metal body having non-foamable functional structural elements integrally bonded and fixedly embedded in the foamed body. Further covering layers may be secured to the demolded metal foam panels (e.g. see column 2, lines 20-47). In addition, there is no evidence of record that the molded foamed panels of Valdo before demolding would not read on the physical article described in applicant's claims requiring that the body be sandwiched between two forms made of metal (e.g. see applicant's claims 12, 13). Regarding the limitation "wherein the mold shaped foamed metal body is from metal powder comprising aluminum" (e.g. claim 11, lines 2-4; claim 18, lines 2-4), Valdo clearly discloses that methods of making his foamed metal are those methods found in the patents cited in his disclosure (e.g. column 3, line 21 - column 4, line 7) and the foam metal can

Art Unit: 1775

be aluminum (e.g. column 1, lines 7-30). These methods clearly include making foamed metal articles from metal powder (e.g. see Valdo's citations of U.S. Patent 1,642,348; U.S. Patent 2,935,396; U.S. Patent 2,979,392, etc. . .). Therefore it is clear that Valdo teaches to use metal powder processes with sufficient specificity when performing his invention as to anticipate the rejected claims. Regarding claim 18, the structural elements of Valdo clearly are shaped to form mechanical bonds (e.g. see Figures 1-2). Regarding claim 23, the recitation of the metal powder and the density of presumably the semifinished precursor before foaming is noted, but has not been shown to distinguish over the reference. Regarding the limitation that the "structural element has at least a surface of compatible material which bonds to the foamed metal powder (e.g. see claim 11, last two lines), there is no indication in Valdo that the structural elements are not compatible and would not form bonds at the temperatures used in foaming. Trademark Office can require applicants to prove that prior art products do not necessarily or inherently possess characteristics of claimed products where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on applicants where rejection based on inherency under 35 U.S.C. 102 or on prima facie obviousness under 35 U.S.C. 103, jointly or alternatively, and Patent and Trademark Office's inability to manufacture products or to obtain and compare prior art products evidences fairness of this rejection, *In re Best, Bolton, and Shaw*, 195 USPQ 431 (CCPA 1977). Regarding claim 24, the method steps are noted, but when there is a substantially similar product, as in the applied prior art, the burden of proof is shifted to the applicant to establish that their product is patentably distinct not the examiner to show that the same process of making, see *In re Brown*, 173 U.S.P.Q. 685, and *In re Fessmann*, 180 U.S.P.Q. 324.

Art Unit: 1775

6. Claims 11 and 18-24 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Bjorksten (U.S. Patent 3,941,182).

7. Bjorksten discloses an article comprising a foamed aluminum metal body having embedded metal structural reinforcing elements which are coated with an adhesion promoting metal coating (e.g. see column 4, lines 34-55). The article is made by sandwiching the foamed composite body between mold walls. A foaming agent is used (e.g. see column 1, lines 31-47). Regarding the limitation "wherein the mold shaped foamed metal body is from metal powder" and the method limitations of claim 24, when there is a substantially similar product, as in the applied prior art, the burden of proof is shifted to the applicant to establish that their product is patentably distinct not the examiner to show that the same process of making, see *In re Brown*, 173 U.S.P.Q 685, and *In re Fessmann*, 180 U.S.P.Q. 324. Regarding claim 23, the recitation of the metal powder and the density of presumably the semifinished precursor before foaming is noted, but has not been shown to distinguish over the final product of the reference. Trademark Office can require applicants to prove that prior art products do not necessarily or inherently possess characteristics of claimed products where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on applicants where rejection based on inherency under 35 U.S.C. 102 or on prima facie obviousness under 35 U.S.C. 103, jointly or alternatively, and Patent and Trademark Office's inability to manufacture products or to obtain and compare prior art products evidences fairness of this rejection, *In re Best, Bolton, and Shaw*, 195 USPQ 431 (CCPA 1977).

8. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Valdo (U.S. Patent 3,848,666).

9. Valdo, as described above, is incorporated into this rejection. Valdo discloses an article comprising a foamed metal body having embedded metal structural elements (e.g. tubes, blocks or plates) which act as reinforcements (e.g. see column 5, lines 8-41). Valdo specifically discusses foaming the panels between molding sheets and then removing the molding sheets (e.g. see column 3, lines 8-40). This forms a mold shaped demolded shaped foamed metal body having non-foamable functional structural elements integrally bonded and fixedly embedded in the foamed body. Further covering layers may be secured to the demolded metal foam panels (e.g. see column 2, lines 20-47). Valdo differs from claims 14 and 15 in that Valdo may not disclose any specific embodiments wherein at least one of the two molding sheets is curved. Valdo, however, does disclose that his panels are useful as floor panels, panels in freezing compartments, wall panels and roof panels (e.g. see column 4, line 60 - column 5, line 6) as well as light weight cooling vent units, heat exchange units, evaporative units, building heating units and structures for the automobile industry (e.g. see column 1, lines 10-25). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to make Valdo's panels in any shape that could be typically found in any of these uses since Valdo discloses these uses to be an end use for his panels. The examiner notes that there is no patentable distinction in forming the panels of Valdo to meet any structural shapes typically found in floor panels, panels in freezing compartments, wall panels, roof panels, light weight

Art Unit: 1775

cooling vent units, heat exchange units, evaporative units, building heating units and structures for the automobile industry since Valdo intends for the panels to be adapted for these end uses. Regarding the limitation "wherein the mold shaped foamed metal body is from metal powder" (e.g. claim 11, lines 2-3; claim 18, lines 2-3), Valdo clearly discloses that methods of making his foamed metal are those methods found in the patents cited in his disclosure (e.g. column 3, line 21 - column 4, line 7). These methods clearly include making foamed metal articles from metal powder (e.g. see Valdo's citations of U.S. Patent 1,642,348; U.S. Patent 2,935,396; U.S. Patent 2,979,392, etc. . .). Therefore it is clear that Valdo teaches to use metal powder processes with sufficient specificity when performing his invention as to anticipate the rejected claims. In any event, when there is a substantially similar product, as in the applied prior art, the burden of proof is shifted to the applicant to establish that their product is patentably distinct not the examiner to show that the same process of making, see *In re Brown*, 173 U.S.P.Q. 685, and *In re Fessmann*, 180 U.S.P.Q. 324.

Response to Arguments

10. Applicant's arguments filed May 18, 2006 and July 5, 2006 have been fully considered but they are not persuasive with regards to the pending rejections.

11. Regarding the limitation "wherein the mold shaped foamed metal body is from metal powder comprising aluminum" (e.g. claim 11, lines 2-4; claim 18, lines 2-4), Valdo clearly discloses that methods of making his foamed metal are those methods found in the patents cited in his disclosure (e.g. column 3, line 21 - column 4, line 7) and Valdo very specifically states that

Art Unit: 1775

the foam metal can be "aluminum" as well as "aluminum alloys" (e.g. column 1, lines 10-12).

Likewise, Bjorksten specifically used foamed "aluminum" (e.g. see column 2, lines 34-51).

Regarding amended claim 18, the embedded structural elements of Valdo clearly are clearly shaped and thus would necessarily form mechanical bonds with the foamed metal body (e.g. see Figure 2 of Valdo). In addition, the reinforcing elements of Bjorksten can also be a gauze and thus would necessarily form a mechanical bond with the foamed body (e.g. see Figure 8).

Regarding amended claim 23, the recitation of the metal powder and the density of presumably the semifinished precursor before foaming is noted, but there is no evidence of record that the recitation of the density of the precursor distinguishes over the final product of the applied references. Regarding the limitation that the "structural element has at least a surface of compatible material which bonds to the foamed metal powder (e.g. see claim 11, last two lines), there is no indication in Valdo that the structural elements are not compatible and would not form bonds at the temperatures used for foaming. Bjorksten clearly discloses that his metal coatings are promote adhesion. Trademark Office can require applicants to prove that prior art products do not necessarily or inherently possess characteristics of claimed products where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on applicants where rejection based on inherency under 35 U.S.C. 102 or on prima facie obviousness under 35 U.S.C. 103, jointly or alternatively, and Patent and Trademark Office's inability to manufacture products or to obtain and compare prior art products evidences fairness of this rejection, *In re Best, Bolton, and Shaw*, 195 USPQ 431 (CCPA 1977). Regarding the method limitations of claim 24, the method steps are noted, but when there is a substantially similar product, as in the applied prior

Art Unit: 1775

art, the burden of proof is shifted to the applicant to establish that their product is patentably distinct not the examiner to show that the same process of making, see *In re Brown*, 173 U.S.P.Q. 685, and *In re Fessmann*, 180 U.S.P.Q. 324.

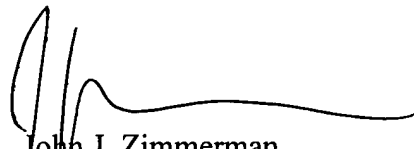
Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Zimmerman whose telephone number is (571) 272-1547. The examiner can normally be reached on 8:30am-5:00pm, M-F. Supervisor Jennifer McNeil can be reached on (571) 272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1775

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



John J. Zimmerman
Primary Examiner
Art Unit 1775

jjz
August 14, 2006